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ABSTRACT

A study attempted to measure the academic gain resulting from 150 hours of mandatory participation in the Mandatory Functional Literacy (MFL) program. The Test of Adult Basic Education (TABE) was administered to 58 inmates at Lake Correctional Institution (Florida) prior to beginning the MFL program and again upon completion of the required instruction. It was hypothesized that participation in the MFL program would result in grade-level gains that would be significant and predictable. To test this hypothesis, two research questions were addressed: (1) is there a significant gain between pretest and posttest TABE scores among MLF students? and (2) if the gain between pretest and posttest TABE scores is significant, is it predictable? When the grade equivalent scores were compared using the t-test, it was determined that the gains were significant. Using regression analysis, a simple linear model was derived to predict expected posttest score, given the pretest score. The equation was found to be significant. The significant grade level gains documented by the study may serve as a prerelease measure of the positive effect of correctional education. In addition, the results indicate that when inmates are required to participate in correctional education, academic progress is a predictable result. (Six references are included.) (NLA)

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An Analysis of Expected Grade Level Gain as a Result of Participation in the Mandatory Functional Literacy Program

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Abstract

The Test of Adult Basic Education (TABE) was administered to fifty-eight inmates at Lake Correctional Institution prior to beginning the Mandatory Functional Literacy (MFL) program and again upon completion of the required 150 hours of instruction. The grade equivalent scores were compared using the t-test and it was determined that the gains were significant at the $\alpha<.01$ level. Using regression analysis, a simple linear model was derived to predict expected post-test score, given the pre-test score. The equation was found to be significant at the $\alpha<.01$ level. The coefficient of determination was .80, indicating that eighty percent of the variations in post-test score could be explained by relating to the pre-test score.

The MFL program was instituted at Lake Correctional Institution in January, 1989 in order to comply with F.S. 242.68. There have been several reports of the success of the program, but studies documenting the success of the program and its impact on the participants are not available. The present study is an attempt to measure the academic gain resulting from the 150 hours of mandatory participation.

It was hypothesized that participation in the MFL program would result in grade level gains which would be significant and predictable. To test this hypothesis, two research questions were addressed: (1) Is there a significant gain between pre-test and post-test TABE scores among MFL students?; and (2) If the gain between pre-test and post-test TABE scores is significant, is it predictable?

Literature Review

According to MacCormick (1931), compelling inmates to enroll in education is self-defeating because the inmates will resent education. However, Raffett (1983), has maintained that for success in the society, every inmate needs to read, write, and do basic mathematics. Accordingly, no inmate should be released until he has attained a level of basic education.

Coffey (1987), has shown that the illiteracy rate in prison is ten times that seen in the general society. Therefore was maintained that mandatory education should be instituted for all illiterate inmates. Waksman, Silverman and Weber (1983), maintained that illiteracy may be the cause of criminality. Miller (1987), agreed that the correlation between illiteracy and incarceration was positive. As Duguid (1987), has shown, prison affords the incarcerated an opportunity to begin learning anew.

Although compulsory education is contradictory to popular educational philosophy, the available literature justifies mandatory participation in education. Mandatory education may serve to alleviate illiteracy among prisoners and reduce crime.

Methods

New inmates arriving at the institutions are screened for possible candidacy for MFL. Those who are not exempted by provisions of F.S. 242.68 are tested using the Test of Adult Basic Education level M. If they score less than 9.0 they are enrolled in MFL and retested at the end of 150 hours of instruction. The 58 subjects used in this study were inmates who completed this process at Lake Correctional Institution, a 560 man, close custody, adult men's institution located in central Florida.

The TABE tests were administered according to the directions provided by the publisher. The data were collected ex post facto and represent a point in time. Mean scores and standard deviations were determined for the pre and post-tests. A one-tailed t-test was performed to determine significance of the gain. A Pearson correlation coefficient was calculated and linear regression analysis was performed to determine correlation and predictability.

Results

The pre-test and post-test means and standard deviations are presented in Table 1. The means were subjected to a t-test to determine the significance of the difference. It was found that the post-test mean was significantly higher than the pre-test mean ($t=7.0758$; $\alpha<.01$).

Table #1 Goes Here

The Pearson correlation coefficient was calculated to determine correlation between the pre-test and post-test scores. The Pearson correlation coefficient was .89 ($\alpha<.01$).

Using regression analysis, a simple linear model was derived to predict expected post-test score, given the pre-test results. The regression equation was determined to be

$$Y' = .0617 + 1.1972(X)$$

where X is the pre-test score and Y' is the predicted post-test score $F(1,56)=224.18$ ($\alpha<.01$). A graphic representation was prepared to demonstrate the regression line and the 99% confidence interval (Figure 1).

Figure #1 Goes Here

Discussion

As shown in Table 1, there is a significant gain in grade level as a result of participation in MFL. The difference of the means was 1.1 which was significant at the $\alpha<.01$ level. The regression analysis yielded a significant regression equation which is a valid predictor of grade level gain.

The effect of participation in correctional education has most often been measured in terms of post-release adjustment or recidivism. The significant grade level gains documented by this study may serve as a pre-release measure of the positive effect of correctional education.

MacCormick (1931), maintained that compulsory education is self-defeating because participation is coerced. It could be inferred that when inmates are coerced to participate in education, there should be no educational progress. The results of this study however, indicate that when inmates are mandated to participate in correctional education, academic progress is a predictable result.

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Raffett, S. S. (1983). The correctional school and the public mind. Journal of correctional education. 34(2), 40-43.

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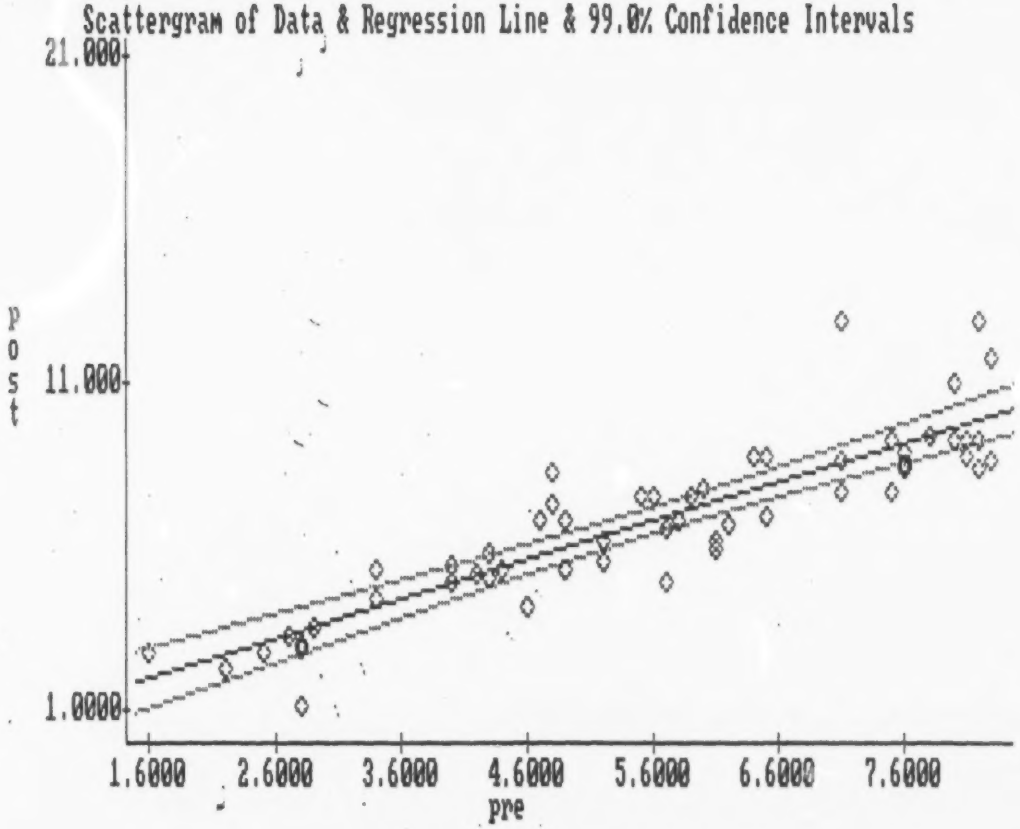
Table 1

Grade Equivalent Means and Standard Deviations of TABE Pre-tests and Post-tests

Pre-test		Post-test	
Mean	S.D.	Mean	S.D.
5.5	1.96	6.6	2.62

n=58


Scattergram of Data & Regression Line & 99.0% Confidence Intervals
21.000
11.000
1.0000
post
1.6000
2.6000
3.6000
4.6000
5.6000
6.6000
7.6000
pre

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